

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/07/03

Date Received: 01/03/03

Project: Metro Self Monitor, PO# M89884, F&BI 301017

Date Extracted: 01/06/03

Date Analyzed: 01/06/03

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE
FOR TOTAL METALS BY
INDUCTIVELY COUPLED PLASMA (ICP)
(METHOD 6010)**

Results Reported as mg/L (ppm)

<u>Sample ID</u> Laboratory ID	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M89884 301017-01	0.22	0.30	0.16	<0.05
Method Blank	<0.05	<0.05	<0.05	<0.05

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**QUALITY ASSURANCE RESULTS
FROM TOTAL METALS BY
INDUCTIVELY COUPLED PLASMA (ICP)
(METHOD 6010)**

Laboratory Code: 301020-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.11	0.05	a	0-20
Copper	mg/L (ppm)	1.1	1.1	0	0-20
Nickel	mg/L (ppm)	<0.05	<0.05	nm	0-20
Zinc	mg/L (ppm)	0.15	0.15	0	0-20

Laboratory Code: 301020-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	% Recovery MS	Acceptance Criteria
Chromium	mg/L (ppm)	2	0.11	81	50-150
Copper	mg/L (ppm)	2	1.1	91	50-150
Nickel	mg/L (ppm)	4	<0.05	79	50-150
Zinc	mg/L (ppm)	2	0.15	81	50-150

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Chromium	mg/L (ppm)	2	96	97	80-120	1
Copper	mg/L (ppm)	2	97	99	80-120	2
Nickel	mg/L (ppm)	4	93	90	80-120	3
Zinc	mg/L (ppm)	2	91	87	80-120	4

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
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January 7, 2003

DUPLICATE COPY

INVOICE # 03ACU0107-1

Accounts Payable
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M89884, F&BI 301017 - Results of testing
requested by Gerry Thompson for material submitted on January 3, 2003.

1 sample analyzed for Total Chromium, Copper, Nickel and Zinc
by Method 6010B @ \$80 per sample \$ 80.00

Amount Due \$ 80.00

FEDERAL TAX ID # (b) (6)

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January 7, 2003

Gerry Thompson, Project Manager
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on January 3, 2003 from the Metro Self Monitor, PO# M89884, F&BI 301017 project. There are 2 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Charlene Morrow for

Michael Erdahl
Project Manager

Enclosures
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